The Relationship of Umiray Dumaget to Other Philippine Languages

Ronald S. Himes

SAN DIEGO STATE UNIVERSITY

Most scholars who have addressed the problem of categorizing Philippine languages have related Umiray Dumaget (DGTU) most closely to other languages spoken by Negritos in northeastern Luzon, languages in the Cordilleran microgroup. Reid (1994) suggests that DGTU is not a Cordilleran language but rather that it is relatable to Bikol, a Central Philippine language. While the evidence from phonological changes and the pronominal system does not compel us to favor one subgrouping over the other, the lexical data do show that DGTU is most closely related to the Central Philippine languages. Culturally, we can infer that DGTU results from very early contact between the non-Austronesian-speaking Negrito population and speakers of that variety of Central Philippine that evolved into Tagalog, Bikol, and the Bisayan languages. A consequence of this grouping is that any inherited lexeme that DGTU shares with non–Central Philippine languages must be assigned to a higher level.

1. BACKGROUND.[1] East Central Luzon is the homeland of the group of about 3,000 people speaking Umiray Dumaget (DGTU). "Dumagat" is an exonym applied to a wide variety of groups of the Negrito physical type, most of whom prefer the term Agta, Alta, Ayta, or some other derivative of the Proto-Philippines (PPH(Z)) *qaRta[ ] 'person'.[2] Local names for the group in question abound—*tagi kellogen, tagi bulus, tagi kabuluwen, tagi depoynga,* and so forth—but the designation Umiray has most often been used in the literature (Macleod 1972, McFarland 1980, Walton 1979, Thomas and Gieser 1973, Reid 1994).

This language covers a relatively wide area of eastern Luzon from southern Aurora, just south of Baler, along the coast to at least Infanta in Quezon, and west-

ward into Nueva Ecija, Bulacan, and Rizal provinces. Some speakers of this language are found in communities along the northern coast of Polillo Island (Reid, pers. comm.). There is only minor dialect variation among DGTU speaking communities. DGTU is not mutually intelligible with any other Philippine language.

Thomas and Gieser (1973:65) grouped the "Dingalan Bay Dumaget group: Umiray, Diteki, Tagi Kabuluwen, Depoynga, Anglat" with other Agta languages under "Northern Negrito group and Luzon various." On the basis of lexicostatistics, Walton (1979:81) subgrouped DGTU with Casiguran Dumagat (DGTC), the pair splitting off from Northern Cordilleran at 45% of shared cognates. This percentage of shared cognates is high, at least as far as DGTU is concerned, undoubtedly because of unexcluded borrowings; Headland and Headland (1974) calculate the percentage of cognates shared by DGTC and DGTU as 36 %, and this writer at 35%. McFarland (1980) also links DGTU with DGTC and the latter's close relatives East Cagayan Negrito, Paranan, and Kasiguranin. The latter are classified together as the Northern Dumagat languages, and DGTU is separated into a class by itself. "Dumagat (Umirey) is very different from the other four, and may actually belong to a different subgroup (such as Northern Cordilleran) or constitute a subgroup by itself" (66). He nevertheless states that the "Dumagat languages are part of the Northern Philippine group, within which their closest relatives are probably the Northern Cordilleran languages" (66). Reid, in contrast, holds that the closest relatives of DGTU are not to be found in the northern Philippines. Rather, "a cursory inspection of sound changes and verb morphology suggests that it is probably a Central Philippine language, related fairly remotely to the Bikol languages" (1994:41).

2. THE PROBLEM. In his 1994 article "Possible non-Austronesian lexical elements in Philippine Negrito languages," Reid argues convincingly that languages spoken by modern Negrito populations are the descendants of creolized Austronesian speech acquired by the Negritos soon after coming into contact with the invading population. If these languages, indeed, developed from creoles, then they should not appear in a family tree of true Austronesian languages. Reid acknowledges this, writing (39): "I shall continue, however, to refer to them as members of particular subfamilies of Philippine Austronesian languages, with the understanding that this is a convenient fiction for the purpose of identifying those languages with which the Negritos must have acquired the Austronesian component that now overwhelmingly dominates their languages." This same practice is followed here.

Nowhere in the Philippines did a Negrito group maintain its original non-Austronesian language. Some modern Negrito languages are very closely related to those

---

2. Reconstructions at the levels of PAN, PMP, PHN, and PPH are those of Blust (B), Charles (C), Dempwolff (D), Dyen (Dy), and Zorc (Z) as they appear in Wurm and Wilson (1975). Additional reconstructions are from Blust (1970, 1980, 1986, 1989), Zorc (1986, 1994), Reid (1991) (R), and Himes (unmarked). Language abbreviations: ALTN, Northern Alta; ALTS, Southern Alta; BKL, Bikol; CC, Central Cordilleran; DGTC, Casiguran Dumagat; DGTU, Umiray Dumaget; NC, Northern Cordilleran; PAN, Proto-Austronesian; PHF, Proto–Hesperonesian-Formosan; PHN, Proto-Hesperonesian; PMP, Proto–Malayo-Polynesian; PPH, Proto-Philippines; SBL, Sambalic; SC, Southern Cordilleran; TAG, Tagalog.

of their non-Negrito neighbors. Atta of Cagayan province is mutually intelligible with Ibanag, and the Halità dialect of Ayta is mutually intelligible with Sambal of Botolan, Zambales. Others are not mutually intelligible with other languages but are clearly related to well established groups, such as Central Cagayan Agta and the Northern Cordilleran languages of the Cagayan Valley. Still others can be linked to languages even more remotely related by evidence of phonological changes and shared lexicon, as is the case with the Alta languages and the South–Central Cordilleran group (Reid 1991).

The problem addressed here is this: on the basis of phonological changes and shared lexicon, can DGTU be more closely linked with the Cordilleran languages of northern Luzon or with the Central Philippine group of languages? The implications of the answer are several. If DGTU is a Cordilleran language, then any nonborrowed lexical items shared by DGTU and some non-Cordilleran language would provide evidence for a higher level of reconstruction. Likewise, if DGTU is a Central Philippine language, then nonborrowed lexical items shared with northern Philippine languages must also be assigned to a higher level.

Throughout the discussion that follows, we are faced with the problem of lexical diffusion. Today, at least, DGTU is a language in contact with many others. To the north are the speakers of Dumagat languages mentioned above as well as Northern Alta and Arta. In Bulacan, DGTU speakers are coresident in several places with the Southern Alta. In Rizal, in the remote barangays of Tanay municipality, DGTU and Sinauna are in contact. And on the periphery of their entire territory and increasingly within it, Tagalog is spoken. Loans from Bikol provide evidence of contact with that language, either ancient or recent. Given the tremendous timespan that DGTU has had to develop, and to develop in contact with other languages, the problem of unraveling the native from the borrowed is a daunting one. Every effort has been made here to accomplish this, but undoubtedly there are some miscalculations.

3. PHONOLOGY

3.1 DIAGNOSTIC CHANGES. For the purpose of grouping languages sharing a common ancestor, certain sound changes are more diagnostic than others. In the northern Philippines, for example, reflexes of PPH *R give us the evidence to subgroup a language. If the reflex is *g,* then the language is most likely linked with Northern Cordilleran; if the reflex is *l,* the language is most likely to be a Meso Cordilleran one. The most useful of the changes affecting DGTU are the PPH pepet vowel (or schwa) and the consonants *R and *j. Unfortunately, unambiguous items containing reflexes of these consonants are extremely few.

3.2 VOWELS. PPH had four phonemic vowels: *i, *u, *e (schwa), and *a. DGTU appears to have three vowel phonemes: *i, u, a,* although the high vowels are often manifested as mid vowels. Because all five vowels are used in the literature (cf. Macleod 1972), they are used here as well. Note the occurrence of *weli, wele,* and *wile* all meaning 'younger sibling', and *ulu, olu,* and *olo* all meaning 'head'.

3.2.1 *i and *u. The PPH high front vowel is reflected as *i* (or *e*) in nearly all cases. In some very restricted environments it is reflected as *o:* *bukid, *bukod* 'forest'; *laŋit, *laŋot* 'sky'; *taŋis, *taŋos* 'cry'; *putik 'mud', *putok* 'land'. Likewise, the high back vowel is nearly always reflected as such, but it is manifested as a front vowel on a very few occasions: *bakud, *beked* 'fence'; *unud, *unid* 'flesh'. This also happens with schwa, in a few instances when a back vowel is expected: *hapjes, *apdis* 'stinging pain'; *pusej, *pusid* 'navel'; *baŋles, 'rancid', *baŋlis* 'fragrant'.

3.2.2 *a. PPH *a is reflected as a front vowel after a glide or after a voiced stop. Elsewhere it is manifested as *a:* *batu, *beto* 'stone'; *gayat, *geyet* 'slice'; *dagdag, *digdig* 'fall; *kawayan, *kaweyen* 'bamboo'; *u-aji, *wele* 'younger sibling'.

　　In some communities of Rizal, at least, *a* occurs after a voiced stop, but the latter is palatalized, as for example, *bʸato* 'stone'. This is often true also of loans such as *bʸaŋka* 'boat'. This palatal gliding of the voiced stop is also found in the Barlig dialect of Bontok (Himes 1984/1985).

3.2.3 *e. The PPH pepet vowel is merged with the front and back vowels. When it is the last vowel of the stem, *e is reflected as *o;* this also occurs in reduplicated monosyllables: *tanem, *tanom* 'plant'; *ŋipen, *ŋipon* 'tooth'; *qutek, *utok* 'brain'; *yegyeg, *yogyog* 'earthquake'; *ye(k)yek, *yokyok* 'armpit'.

　　When it is the penultimate vowel of a stem without reduplication, *e is reflected as *i:* *helat, *ilat* 'wait'; *ʔelek, *ilok* 'laugh'; *penuq, *pino* 'full'; *edeg, *idog* 'back'.

3.2.4 Vowel Reduction. Vowel clusters, some of which are from PPH but most of which are produced by the loss of an intervening consonant, are reduced to a single vowel if the two vowels are identical or if the first vowel is the low vowel: *Rabii(h) ~ *Rabi, *abi* 'night'; *tuhud ~ *tuud, *tud* 'knee'; *paqa[ʔh], *pa* 'thigh'; *beRey ~ *beey, *boy* 'give'; *ma-paqit ~ *ma-pait, *mapit* 'bitter'; *ma-Zaqet ~ *ma-laet, *malot* 'bad'.

　　Sequences of a high vowel and low vowel are not reduced, and a glide is introduced to separate the syllables: *bihaR ~ *biag, *biyeg* 'sated'; *pia ~ *pia-en ~ *pion, *piyon* 'good'; *beRqat ~ *biat, *biyet* 'heavy'; *luhaq ~ *lua, *luwe* 'tear'.

　　There are no unambiguous instances of a back-vowel–pepet sequence. One case may be a loan from Bikol: *buqel ~ *buel, *buol* 'heel'.

3.2.5 Discussion of the Vowels. The shift from *i to *u* and *u to *i* appears to be unique to DGTU. The fronting and raising of *a is shared with some other languages of northern Luzon. In the environment following a voiced stop, the Dumagat languages to the north of DGTU also reflect *a as *i* or *e;* Southern Alta reflects it as *e;* and both Northern Alta and Ilongot raise *a to *i*. Apparently these changes do not occur in Central Philippine languages, but rather they are an areal feature in central and northern Luzon.

　　The reflexes of schwa are only slightly more diagnostic. In those languages of northern Luzon that reflect *e as something other than a high or mid central vowel, a back or a low vowel are the outcomes. The Central Cordilleran languages Isinai, Ifugaw, and Kalinga regularly show a shift from *e to *o,* and some of the Northern

Cordilleran languages of the Cagayan Valley have *a* as a reflex of *e. While a few Central Philippine languages, such as Kuyonen, retain a central vowel, most of them have a back vowel reflex of schwa. Only Tagalog, another Central Philippine language, has an *i* reflex of *e.

The reduction of the sequence *ii to a single high front vowel in the item meaning 'night' is common throughout the Philippines. Other than that, however, this sort of vowel reduction appears to occur only in the Northern Cordilleran languages and in the southern Philippines; it seems to be absent in the Central Philippine languages.

The evidence from the vowels, then, does not weigh heavily in favor of either a northern or a Central Philippine affinity for DGTU.

3.3 CONSONANTS. Most of the PPH consonants are inherited intact by DGTU. These include *p, *t, *k, *b, *g, *s, *l, *r, *m, *n, *ŋ, *w, *y.

3.3.1 *q, *ʔ, and *h. All three of these PPH phonemes are lost in DGTU. Currently, *ʔ* does occur in DGTU in words of outside origin, mostly from Tagalog. Also, a nonphonemic glottal stop is added to vowel-final words in careful speech, a characteristic shared with the Dumagat languages but also found in such non-Negrito languages as Kalanguya in Southern Cordilleran: *dilaq, *dila* 'tongue'; *qatep, *atop* 'roof'; *paqit ~ *ma-paqit ~ *mapait, *mapit* 'bitter'; *pusaʔ, *posa* 'cat'; *ʔinum, *inom* 'drink'; *hapun, *apon* 'afternoon'; *bihaR, *biyeg* 'sated'.

DGTU has *h* in some lexical items that appear not to be Austronesian in origin, such as *haŋa* and *hoʔho ~ hoho,* both meaning 'big'.

3.3.2 *j and *d. PPH *j merged with *d in all environments. *d is reflected as *d* initially, postconsonantally, finally, and between *i* and *a.* In other intervocalic environments, *d is reflected as *l,* as in some central and southern Philippine languages (Zorc 1987): *palaj, *palad* 'palm of hand'; *pusej ~ *pused, *pusid* 'navel'; *pija ~ *pida, *pide* 'when?'; *ŋajan ~ *ŋadan, *ŋalan* 'name'; *pajes ~ *pades, *palos* 'wind'; *u-aji ~ *wadi, *wele* 'younger sibling'; *bayad, *beyed* 'pay'; *dilaq ~ *dila, *dila* 'tongue; *hiR(e)daʔ ~ *igda, *idde* 'lie down'; *tiŋzak ~ *tindak, *tindek* 'kick'; *qida ~ *ida, *ide* 'they'; *-dani ~ *a-dani, *alane* 'near'.

One problematic item, *pogu* 'island' from PPH *pujuq, may be a loan from a Northern Cordilleran language or some other language where *j regularly goes to *g.

3.3.3 *R. PPH *R is reflected in DGTU as *g* or zero. *R is lost in initial position before the front vowel, between identical vowels, and intervocalically between a front vowel and a low or back vowel: *R(ae)hinawa ~ *Rinawa, *inawe* 'breathe'; *Rikna *ikna* 'hear'; *qabaRaʔ ~ *abaa, *abe* 'shoulder'; *baqeRuʔ ~ *baeRu ~ *buRu-en ~ *bu-en, *bowon* 'new'; *beRey ~ *beey ~ *bey, *boy* 'give'; *tala-baRa-an ~ *tala-baa-an ~ *tala-bi-an ~ *tala-miyan, *talamiyen* 'lung'; *beRyan ~ *biRyan ~ *biyan, *biyen* 'give'; *beRqat ~ *biRat ~ *biat, *biyet* 'heavy'; *diRus ~ *dius, *diyus* 'bathe'.

In other environments, *R is reflected as *g*: *Rusuk, *gusok* 'chest'; *Rataŋ, *getaŋ* 'buy'; *Raŋu, 'dried' *geŋo* 'mature coconut'; *uRat, *uget* 'vein'; *buRa, *buge* 'spit out'; *huRas, *oges* 'wash'; *taRuq, *tagu* 'hide'; *pataR, *patag* 'smooth'; *saleR,

salog 'floor'; *tubaR, *tubeg* 'answer'; *sunuR, *sunug* 'burn'; *qaRta, *agta* 'person (Negrito)'; *hiRedaʔ ~ *iRda, *igda *idde* 'lie down'.

Two items are unexplained. PPH(Dy) *Rabii(h) 'night' is reflected in DGTU as *abi* where *gebi* is expected. This form is shared with Sinauna, from which it may have been borrowed. And DGTU *apo* 'lime', as opposed to *apug,* is the reflex of PPH(Z) *qapuR. Apparent violations of these rules, where *g* rather than zero occurs, can safely be attributed to the influence of other languages: *beRas ~ *biyes, *biges* 'husked rice' < TAG *bigas;* *ha-diRi ~ *ali, *aregi* 'post' < BKL *ʔarigi;* *kaRat ~ *kat, *kaget* 'bite' < TAG and BKL *kagat;* *kuRun ~ *kun, *kogun* 'cogon' < TAG *kugon.*

The only unambiguous item that contains the sequence *CR is PPH *tageRaŋ ~ *tagRaŋ 'rib'. The DGTU form *taglaŋ* is most likely to have been borrowed from Northern Alta, which has *l* as the regular reflex of *R.

3.3.4 Discussion of the Consonants. In most languages of the Philippines—perhaps all of them except Kalamian Tagbanwa, Agutaynon, and Tboli, *q has merged with the glottal stop. And in many Philippine languages *h has also merged with the glottal stop. Loss of the glottal stop, however, is not common. This does occur in Ilokano, Arta, and Northern Cordilleran languages regularly, and it also occurs in some dialects of Kalinga and in some environments in Isinai. Elsewhere, loss of the glottal stop appears to be limited to some southern Philippine languages, such as Subanun.

The *d* reflex of *j is common throughout the Philippines, especially in final position, and the intervocalic *l* reflex occurs in the Kalamian and Sangiric microgroups, as well as in Tagalog, but not in northern Philippine languages, where it is generally reflected as *g.*

Ordinarily *R is a highly diagnostic phoneme. It is regularly reflected in Central Philippine languages as *g,* but this also happens in Northern Cordilleran. A zero reflex of *R also occurs in some Cordilleran languages, but this is a secondary development (Reid 1973). For example, in the Central Cordilleran languages, *R predictably goes to *l,* which later may be lost in some environments, as happens in Kankanaey, Isinai, and certain dialects of Ifugaw and Kalinga. Likewise, in Gaddang, *R is reflected as *g,* which then is lost (and replaced with a glide) after the high front vowel and before a nonfront vowel.

In short, the evidence from the consonants provides some slight motivation to relate DGTU more closely with the Central Philippine languages.

4. PRONOUNS. Personal pronouns often provide strong evidence for the subgrouping of Philippine languages (cf. Reid 1979b). The long-form nominative and the genitive pronouns in DGTU are given in table 1.

None of the DGTU pronouns is truly innovative. All of the long nominative pronouns are based on forms with etyma as far back as PPH, if not farther. The plural forms have acquired a prefix *i-,* either by analogy with the 3P form or as a reinterpretation of the subject marking particle *i.* This prefix occurs elsewhere in the Philippines as well: for example, Sangil and Sangir *ikami* 'we (exclusive)' and Central Cagayan Agta *ikitam* 'we (inclusive)'.

The genitive pronouns are as unyielding of diagnostic information as the long nominatives. All of the genitives can be traced back at least to the level of PPн, and all of them have cognates in both northern Luzon and elsewhere—except for the *tamu* variant of the 1 + 2P form. This form appears only in the Sambalic family and in Iraya. The shorter form *tam,* however, appears in Alangan and Tadyawan and as far away as in Samal in the southern Philippines.

Of all language groups in the Philippines, the DGTU long nominative forms are most similar to those of Bikol and the Bisayan languages, both of which can be reconstructed as shown in table 1. The only differences between these and the DGTU forms are the lack of distinction between the singular and plural 1 + 2 items in Bikol and Bisayan, and different origins for the 3P form. Furthermore, the DGTU system of long nominative pronouns is substantially different from that of the Cordilleran languages.

The genitives, on the other hand, are much more similar to those of the Sambalic languages. The Proto-Sambalic genitive pronouns are reconstructed as shown in table 1. This is identical to the DGTU system, except for the lack in Sambalic of the alternate 1 + 2P form *tam.*

The pronouns, then, provide us with some further evidence to relate DGTU more closely with Central Philippine languages than with those of the Cordilleran microgroup.

5. LEXICON. Lexical data usually provide solid evidence for language history, and they do so in several ways. Clear cases of lexical diffusion indicate culture contact, and occasionally estimates of the time depth of these contacts can be made. A large number of unique items in a basic word list is a sign of a long period of independent development of a language. Lexicostatistics, a technique distrusted by many linguists and anthropologists when used as the sole measure of language relatedness, can still yield a useful first approximation to a family tree. Finally, shared lexical innovations that are judged not to be the result of diffusion form a sound basis for language grouping.

5.1 BORROWING. Lexical diffusion among the languages of the Philippines is well attested, as is its bidirectionality. Tagalog, for instance, has borrowed items

TABLE 1. PRONOUNS

	UMIRAY DUMAGET		PROTO–CENTRAL PHILIPPINE	PROTO-SAMBALIC
	NOMINATIVE	GENITIVE	NOMINATIVE	GENITIVE
1S	ako	ko	*ʔaku	*ku
2S	ikaw	mo	*ʔikaw	*mu
1 + 2S	kita	ta	*kita	*ta
3S	siya	na	*siya	*na
1P	ikami	mi	*kami	*mi
2P	ikamu	yo	*kamu	*yu
1 + 2P	ikitam	tam ~ tamu	*kita	*tamu
3P	ide	di	*si(n)da	*da

from Kapampangan, and vice versa. It is also common throughout the world for a majority language to have a heavier lexical impact on a minority language rather than for there to be a balanced exchange. For example, there are many more Ilokano words in Kankanaey than the reverse.

5.1.1 Tagalog. The number of Tagalog loans in DgtU is, not surprisingly, quite high. Most of these are easily recognized, either because of phonological characteristics or because of their contrast with undoubtedly native words. DgtU, for example, has *tinik* 'thorn' from the identical word in Tagalog, itself regularly derived from PAN(B) *(tT)e(nñ)ek 'thorn;' the expected form in DgtU is *tinok*. In San Andres, Tanay, Rizal, the item elicited meaning 'sea' is [dʸa:gʸɛt] from Tagalog *da:gat,* in competition with *atab,* the usual item for 'sea'. The corresponding DgtU term from PMP(Z) *DáRat would be *det*. To list all of the known Tagalog loans in DgtU would be pointless. Suffice it to say that they are many.

5.1.2 Bikol. Although DgtU and Bikol are not spoken in contiguous areas today, they very likely were at some point in the past. There are a few items that appear to have diffused from Bikol into DgtU. One item is *aregi* 'housepost', whose etymon is PPH(Z) *ha-DiRi. The expected form in DgtU is *ali*. BKL *harigi,* rather than TAG *haligi,* is the likely source of this. Likewise, the DgtU item *abu* 'to cough' is taken from the identical form in BKL, where it is a regular development from Proto–Greater Central Philippine (B) *ebú. The expected form in DgtU is *ibu.*

San Andres, Tanay provides four other items that have competing forms in other DgtU locales. *Gayon* 'pretty' corresponds to an identical form in BKL whereas other DgtU locales provide *alakkey* and *masampat*. Were *gayon* from a PPH form *gayun or *gayen, the expected form in DgtU would be *giyon*. While most DgtU sites have *apoy* for 'fire', San Andes has *kala:yo,* as in BKL. The PPH(Z) item *ŋisi 'to smile' is reflected as *ŋisi* 'to laugh' in BKL and in San Andres, rather than the usual DgtU *ilok*. And the PPH *sir[ae]b 'to burn' is *sirob* in San Andres, as it is in the Rugnot and Inagta dialects of Bikol, rather than *sunug,* as found in other DgtU communities.

Undoubtedly there are other lexemes that could have been taken from Bikol, Tagalog, or elsewhere that here are considered inherited. *Sunug* 'to burn' could be from Tagalog, and *sampat* 'pretty' also occurs in Southern Alta as well as in the Mag-anchi dialect of Ayta.

5.1.3 Sinauna. Sinauna, a language of the Sambalic family, is spoken in some of the very remote sitios of Tanay, Rizal, in the same general area as some DgtU locales. Nevertheless, there does not appear to be a great deal of lexical sharing between the two speech communities. One item in DgtU is almost certainly borrowed from Sinauna: *ikoy* 'tail' is from PAN(Dy) *wikuR. The final *y* is the regular reflex of *R in Sinauna, but in DgtU the expected form is *ikug.*

Another item is problematic. Reid (1994) reconstructs *gerey 'waterfall' as one of the items shared only by Negrito communities in Luzon: *garay* in Sinauna, and *goroy* in DgtU. If this reconstruction is correct, we would expect the DgtU form to

be **giroy.* The dialect of DGTU spoken in Santa Inez, Tanay has *garay,* undoubtedly taken directly from Sinauna.

5.1.4 Southern Alta. ALTS and DGTU share a large number of lexemes exclusively with each other (see 5.3.1.1). Some of these are most likely innovations within the one speech community that diffused to the other, given the close proximity of the speakers of the two languages. Occasionally there is some phonological evidence for the direction of the diffusion. 'Elder sibling', for instance, appears as *uyaŋ* in both languages, but the low vowel following a glide indicates that it is most likely an innovation in ALTS that spread to DGTU, where **uyeŋ* would be expected.

5.1.5 Other Sources. There are other items in DGTU that appear to have been borrowed from some other language, but the source language is indeterminate. For example, *bʸakɛs* 'old person' is a term commonly found in the northern Philippines, usually with the meaning '(old) woman, wife'. It occurs in Bashiic, Central Cordilleran and Northern Cordilleran, and in Northern Alta. It may have been taken from DGTC, where its form *bakɨs* is itself suspicious, because a low vowel does not regularly occur in that language after a voiced stop.

Also, the number 'two', *aduwa,* is irregular, the expected form being **aduwe.* Again this item occurs throughout northern Luzon with the nearest possible donor languages being DGTC with *ɨduwa* and ALTS with *ʔeduwa.*

5.2 UNIQUE ITEMS. Impressionistically, at least, DGTU has a larger than usual number of unique items, whether they are morphologically, semantically, or lexically distinct. On a standard 100-item list of basic vocabulary, 24 percent of the terms are unique. These are: *isin* 'one' (probably from **[ei]sa-in); *oi* 'this' ; *makmok* 'many'; *pesan* 'all' (cf. PPн(Z) **p + isa + n* 'together'); *hoho* 'big'; *antisik* 'short'; *nalibun* 'dead' (cf. Proto–Meso Cordilleran **lɨbɨn* < PHN(Z) **lebeŋ* 'to bury'); *lapsay* 'white'; *putput* 'feather'; *kaksan* 'bone'; *sapok* 'hair'; *siŋut* 'foot'; *sagu* 'blood' (cf. PPн **saRu* 'exude'); *laŋges* 'sand'; *bektas* 'path'; *orat* 'water'; *tapok* 'rain'; *pede* 'sleep'; *surut* 'say'; *totul* 'walk'; *gikan* 'run'; *lipa* 'sit'; *odde* 'stand'; *an* 'not' (cf. Proto-Cordilleran **ʔawan* 'none, not').

Five of the items on the 100-item list are shared exclusively with ALTS: *patud* 'man', ALTS *patud; mahuna* 'woman', ALTS *mahona* 'unmarried woman' (cf. TAG *mahuna* 'weak, frail'); *deyeg* 'egg', ALTS *deyag; aŋut* 'nose', ALTS *ʔaŋut* (cf. PPн **haŋut* 'smell'); *agid* 'leaf', ALTS *ʔagid.*

And four core vocabulary items are borrowed from other languages: *aduwa* 'two' (cf. DGTC *ɨduwa,* ALTS *ʔeduwa,* Gaddang *aduwa*); *tinik* 'thorn' (cf. TAG *tinik*); *kaget* 'bite'(cf. TAG and BKL *kagat*); *abuyen* 'know (person)' (cf. ALTN, ALTS *ʔabuyan*).

Given the possibility that at least some of the items shared exclusively with ALTS may have been unique in DGTU (and borrowed into Alta) or that at least some of those items were borrowed from Alta or elsewhere (replacing items that may have been unique in DGTU), as much as a third of the core vocabulary of DGTU may have been unique.

Those items that appear to be unique to DGTU may be retentions from the language spoken by the ancestors of the Dumaget prior to the coming of the Austronesian speakers. Or they may be innovations adopted subsequent to that first contact, either through the usual processes of language change or consciously adopted as a device to maintain social boundaries. A third possibility is that they are items from the Austronesian contact language that were subsequently lost everywhere except in DGTU (Reid 1994). Whatever is the case or the combination of factors involved, DGTU has maintained its distinctiveness from other languages surrounding it, even those spoken by other Negrito populations, for a very long period of time.

5.3 SHARED LEXICAL INNOVATIONS

5.3.1 Other Negrito Languages. Reid (1994) has identified a large number of lexical items that are found in languages spoken by Negrito populations of Luzon and that are not found in non-Negrito languages there. Some of the possible causes of this sharing are mentioned in the preceding paragraph. Because of the likelihood, however, of sustained diffusion among the Negrito languages, this vocabulary does not provide a firm basis for grouping DGTU with any of the others.

5.3.1.1 One Negrito Language. Innovations that DGTU shares with only one other Negrito language are highly suspect as evidence for language grouping. Those shared with ALTS are the most numerous.

agid	'leaf'	ALTS *ʔagid.* ALTS also has *deʔon,* a loan from TAG *da:hon.*
aklop	'roof'	ALTS *ʔaklop.* DGTU also has *atop.* ALTS has *ʔatop, buboŋan,* and *palopu* as well.
aŋut	'nose'	ALTS *ʔaŋut.* Cf. PPH **haŋut* 'smell'. DGTU also has *saŋo.*
butatala	'star'	ALTS *butatala.* Cf. PMP(Z) **talaq* 'Venus'. Also cf. Pangasinan *kabuntatala* and Sambal *kabuntatalaʔ* 'shooting star'. ALTS also has *bitun* 'star'.
deyeg	'egg'	ALTS *deyag.* DGTU also has *deyag,* indicating that this is probably borrowed from ALTS. DGTU has *itlog ~ etlog* and ALTS also has *ʔitlog,* most likely borrowed from Tagalog in both cases.
haŋa	'big'	ALTS *haŋa.* DGTU also has *hoʔho ~ hoho.* The more commonly elicited term for 'big' in ALTS is *demanta,* which means that *haŋa* has probably been borrowed from DGTU.
kitad	'stick to'	ALTS *kottad.* DGTU also has *tipot.* ALTS also has *kadkut,* a likely derivative of PAN(Z) **dekeC.*
kuragbeŋ	'rat'	ALTS *ʔolagbeŋ.* DGTU also has *kuragbʸaŋ.* Additionally, DGTU has *daga ~ dʸagʸa,* borrowed from Tagalog, and *diggis;* both ALTN and Kapampangan have *dagis,* and several of the Ayta languages have *dagih ~ dagiʔ.* ALTS also has *dege.*
lawig	'see'	ALTS *lawin.* Reid (1994) reconstructs a possible etymon **lawi(g)* 'see', but *lawig* may be a unique in DGTU. DGTU also has *kita,* either from PAN(Dy) **kiTaʔ* or borrowed from TAG *kita.* It also has *kinta;* cf. DGTC *enta* and ALTN *ʔinta.* ALTS has *laway;* cf. Kapampangan *lawe* 'look'.
linow	'green'	ALTS *linaw.* DGTU has *berde* from Spanish via TAG, and ALTS also has *dilaw* 'green' from TAG *dilaw* 'yellow'.
mahuna	'woman'	ALTS *mahona* 'unmarried woman'. Cf. TAG *mahunaʔ* 'frail'.
paripari	'fast'	ALTS *palipali.* This item probably diffused into ALTS from DGTU. ALTS also has *giliŋ ~ geleŋ* from TAG *giliŋ* 'fast (in learning)' and *beksog;* cf. Proto-Cordilleran **bakseg* 'fast'.

patud	'man'	ALTS *patud.* DGTU also has *lalaki,* possibly borrowed from TAG. ALTS has *bulog* from TAG *bulog* 'virile' and *lakay,* either inherited from PHF(Z) *lakay 'old man' or borrowed from elsewhere.
peta	'choose'	ALTS *peta.* Reid reconstructs this as *paʔita. DGTU also has *pili,* most likely from TAG.
sagboŋ	'wall'	ALTS *sagboŋ.* ALTS also has *diŋdiŋ,* probably a loan from TAG.
tabi	'waterfall'	ALTS *tabi.* DGTU also has *goroy* and *garay,* discussed in 5.1.3, *boŋbon* an apparent unique, and *toŋtoŋ* shared with Sinauna *tuŋtoŋ.*
tapur	'bury'	ALTS *tapul.* This item probably diffused into ALTS, which also has *labe.* DGTU also has *libwaŋ,* which could be an irregular development from PHN(Z) *lebéŋ 'bury'.
tewek	'crow'	ALTS *tewak.* DGTU also has *tewak,* indicating that this is probably borrowed from ALTS. DGTU also has *beka* 'crow'.
usaŋ	'charcoal'	ALTS *usaŋ.* DGTU also has *uliŋ* from TAG. Cf. Karaw *kusaŋ* 'charcoal'.
uyaŋ	'elder sibling'	ALTS *uyaŋ.* This item is probably borrowed from ALTS. DGTU also has *kaka,* either inherited from PAN(Dy) *kakaʔ or borrowed from TAG. DGTU also has *ikoya,* from Chinese via TAG.

There is one item that is shared exclusively with Northern Alta.

talab	'dull'	ALTN *talab.* DGTU also has *tumal,* most likely from TAG *tumal* 'slow or dull in some activity'. ALTN also has *ŋodɨl* from Iloko and *purol* from TAG.

One item also appears to be shared with Arta, although it is probably a loan in Arta.

alakkey	'pretty'	Arta *malalaki.* The Arta item may be borrowed from DGTU, because *k is usually reflected as zero in that language. Arta also has a unique *napeppe.* DGTU also has *magayon* from BKL and *sampat,* which also occurs in ALTS and Sambalic languages with the meanings 'good, pretty'.

The dialect of Inagta spoken by a Negrito population in Capalonga, Camarines Norte, provides two items, one of which is an identical form to one in DGTU, the other of which is a putative cognate.

kitkit	'scratch'	Capalonga Inagta *kitkit.*
pede	'sleep'	Capalonga Inagta *pigɛs.* DGTU also has *pedʸa.* If these two items are, indeed, cognates, then we could posit a reconstruction of *pija(s).

One of the Inagta dialects spoken in the Lake Buhi area of Bikol also shares a lexeme exclusively with DGTU.

latom	'black'	BKL (Inagta) *laʔtɨm.*

The languages of northeastern Luzon, generally subsumed under the rubric "Dumagat," are spoken primarily by Negrito populations, and they are in the Northern Cordilleran family, closely related to the languages spoken in the Cagayan Valley. Paranan and Kasiguranin, however, are spoken by non-Negritos. DGTC is the best-documented language of this group. Four items are shared exclusively by DGTU and one Dumagat language.

dʸalog   'slice'   DɢᴛC *dilog.* DɢᴛU also has *sipak,* either from PAN(B) **si(ŋ)pak* 'split' or borrowed from Tᴀɢ *si:pak* 'crack'; and it has *hiwaʔ* and *iwaʔ* from Tᴀɢ *hi:waʔ* 'slice'. DɢᴛC also has *gɨlgɨl* from PPʜ(R) **gelgel,* *gupuŋ* from Proto-Cordilleran, *gayat* and *gilit* from Tᴀɢ, *gapgap* from some unidentified donor language, and two apparent uniques, *ihek* and *palag.*

lewes   'exchange'   DɢᴛC *lewas* 'alternate, take turns'. Both DɢᴛC and DɢᴛU also have *palit,* either inherited from PAN(Dy) **palit* 'exchange gift' or borrowed from Tᴀɢ. DɢᴛU also has *alit;* cf. Isneg and Itawis *alit* 'move, transfer'.

saŋo   'smell'   DɢᴛC *saŋo* 'to scent, of an animal'. DɢᴛC also has *ahob* from Proto-Cordilleran **ʔa:jub* 'smell, stink'. DɢᴛU also has *aŋugtan.* The term *saŋo* also means 'nose' in some DɢᴛU locales.

urom   'pain'   DɢᴛC *uhɨm.* DɢᴛU also has *apdis* and *bigyad.* DɢᴛC has *saket* from PAN(Dy) **sakit* 'pain'.

Finally, DɢᴛU shares three items exclusively with Sinauna.

eyok   'swallow'   Sinauna *iyuk.* DɢᴛU also has *lamun,* either inherited from PPʜ **lamun* or borrowed from Tᴀɢ *lamon.*

toŋtoŋ   'waterfall'   Sinauna *tuŋtoŋ.* Sinauna also has *garay* and *talun,* the latter a likely loan from Tᴀɢ. DɢᴛU also has *goroy* and *garay* (discussed in 5.1.3), *boŋboŋ,* an apparent unique, and *tabi* shared with AʟᴛS.

yedi   'make, weave'   Sinauna *yadi.* DɢᴛU also has *yadi,* which would seem to indicate that this is a loan from Sinauna. DɢᴛU also has *tala* 'weave cloth' and *lala* 'weave mat', the latter inherited from PAN(D) **lajah* or borrowed from Tᴀɢ. Cf. Tᴀɢ *yariʔ* 'happen'.

5.3.1.2 More Than One Negrito Language. There are a number of lexical items in DɢᴛU that are shared with more than one other Negrito language. Again, these may be retentions from a language predating the Austronesian influx, or they may represent retentions from Austronesian lost elsewhere in the family, or they may be innovations in one language that spread to the other(s). However, in none of these scenarios would they contribute evidence helpful in linking DɢᴛU with another of the language groupings of Luzon.

abuyen   'know (person)'   AʟᴛN, AʟᴛS *ʔabuyan.* DɢᴛU also has *kelala* and AʟᴛN has *kilala,* both taken from Tagalog *kila:la.* AʟᴛN also has *ʔannulɨn,* and AʟᴛS has *ʔullapaʔan.* It is possible that DɢᴛU has borrowed this item from Alta.

agʸɛ   'clothes'   AʟᴛS *ʔage* 'clothes', Sinauna *ʔágaʔ* 'G-string'. DɢᴛU also has *demit ~ damit* from Tᴀɢ *damit* 'clothes'.

amamos   'shame'   AʟᴛN *ʔamámɨs,* Central Cagayan Agta *mamʌt.*

arutay   'abaca'   AʟᴛN *ʔadutay,* DɢᴛC *ahutay,* Kasiguranin, Sinauna *arutay.* This item shows a phonological innovation whereby PPʜ **R has been reflected as **r; cf. PPʜ(Z) **Rutay* 'hemp'. Cf. also *ramut* below. DɢᴛU, Kasiguranin and Sinauna all have a loan from Tᴀɢ *ʔabaka.*

bebek   'snake'   AʟᴛS *bebek,* Sinauna *baʔbak.* DɢᴛU also has *bʸabɛk, bebʸak, bʸabʸak,* indicating that this may be a loan from elsewhere. AʟᴛS also has *maysa,* and Sinauna has *baniʔas,* a likely loan from Tᴀɢ *baniyas* 'boa'.

bulus   'river'   Paranan, Kasiguranin *bulus.* This is a semantic shift from PPʜ(Z) **bulus* 'to flow'. DɢᴛU also has *orat,* with the primary meaning 'water', and *elog* from Tᴀɢ *ʔi:log* 'river'. Kasiguranin also has *danum,* from some other source meaning 'water'.

but	'throw away'	ALTN, ALTS *ʔibut;* Paranan, Kasiguranin, DGTC, Arta *ibut.* DGTU also has *abut* 'throw away' and *nabut* 'lose'. ALTN, ALTS *ʔibut,* Central Cagayan Agta *nebut,* Paranan, Kasiguranin *mebut* 'to lose'. Cf. Ibanag *vuttu* and Central Cagayan Agta *ibuttun* 'throw away'.
butil	'tell a lie, lose'	ALTN, ALTS *butil.* DGTU also has *bulaʔan* from TAG. Cf. BKL *butig* 'to tell a lie'. The latter item suggests an ancestral form *butiR, regularly reflected as *butil* in Alta, which then diffused into DGTU.
diklum	'rain-cloud'	Paranan, Kasiguranin, DGTC *diklɨm.* DGTU also has *kudipot.* This item may have been borrowed into DGTU.
geŋo	'mature coconut'	Ambala dialects of Ayta *yaŋo,* Rugnot, and Inagta of Lake Buhi, Bikol *gaŋo* 'mature coconut'. Cf. PMP(B) *Raŋu 'dry'.
kabkab	'frog'	Sin *kabkab;* Inagta of Lake Buhi, Bikol *kabakab* 'frog'.
kinta	'see'	ALTN *ʔinta,* DGTC *enta.* DGTU also has *kita* from PAN(Dy) *kíTaʔ or TAG *ki:ta.*
kuyoŋ	'rat'	ALTN *ʔuyɨŋ,* East Cagayan Agta, DGTC, Paranan, Kasiguranin *kuyɨŋ.* DGTU also has *kuragbeŋ* (see 5.3.1.1).
lanis	'sweet'	ALTN, ALTS *lanis.*
lati	'rattan'	ALTS, ALTN, DGTC, Arta *lati.* DGTU also has *sasa,* and both DGTU and ALTN have *yantok,* loans from TAG.
lutit	'mud'	ALTN, ALTS *lutit.* DGTU also has *lusaw.* This may be an Alta loan in DGTU.
ramut	'root'	East Cagayan Agta *ramot ~ hamot.* While DGTC and some other languages of the northeast coast of Luzon have *gimot,* the expected reflex of PMP(Z) *Ramut, others have reflexes showing a shift from *R to *r. Cf. also Molbog *ramut* 'root' (Blust 1991:93).
tɛ	'there is'	DGTC *te,* Paranan *te, tehud,* ALTN *tidɨn.*

5.3.2 Other Northern Philippine Languages.

Blust recognizes 15 Philippine microgroups, "relatively low-order and noncontroversial genetic groupings that have been independently acknowledged by more than one writer" (1991:77). Three of these—Bashiic, Cordilleran, and Central Luzon—are north of the Greater Central Philippine group of languages. Of the remaining 11 microgroups, six are considered members of the Greater Central Philippine group: Central Philippines (Tagalog, Bikol, Bisayan, and a number of eastern Mindanao languages, such as Mamanwa and Mansaka), South Mangyan, Palawanic, Manobo, Danaw, Subanun, and Gorontalo-Mongondow. The remaining five microgroups are first-order descendants of PPH: Inati, Kalamian, Bilic, Sangiric, and Minahasan. Blust's "Central Luzon" microgroup contains two somewhat distinct segments—Sambalic and North Mangyan—herein considered two separate microgroups. Minahasan and Gorontalo-Mongondow are spoken in northern Sulawesi, and data from those languages are not considered in this paper.

5.3.2.1 Bashiic, Sambalic, and Northern Mangyan.

No one has seriously suggested that DGTU be grouped with a language other than Cordilleran or the Central Philippine group. There is one item, a phonological innovation, that is shared exclusively between Bashiic languages and DGTU, although this could simply be a coincidental convergence.

| tumid | 'chin' | Yami, Ivatan *tumid.* Cf. PAN(B) *timid 'chin'. |

DGTU and Sambalic share one lexeme that does not occur south of Luzon.

kuku   'cough'   SBL: Bolinao, Tina *kuʔkuʔ,* Tina, Botolan, Mag-anchi, Mag-indi, Ambala, Kapampangan *ku:kuʔ.* ALTN also has *kuku,* but the voiceless velar stop indicates that the item must have been borrowed from somewhere, probably from DGTU.

Two items are shared exclusively by DGTU and Northern Mangyan languages.

kisig   'strong'   Northern Mangyan: Tadyawan *kisig.* Cf. CC: Northern Kankanaey *kisil ~ kisɨ* and PPH(Z) *keseG 'strong'.

panubu   'buttocks' Northern Mangyan: Iraya, Alangan *panubuʔ* 'thigh'. Cf. Indonesian and Malay *tubuh* 'body', and NC: Isneg *panobowa:n* 'groin'.

5.3.2.2 Cordilleran. It is with the Cordilleran languages that most of the authors cited earlier have grouped DGTU. Nine items are shared exclusively with a language or languages of one Cordilleran branch: Northern, Central, or Southern.

atipal   'echo'   CC: Northern Kankanaey *ʔatipag.* The noncorrespondence of the final segment is problematic.

beyod   'worm'   SC: Pangasinan *alumbayar.* This item suggests a reconstruction *bay[ae]d.

delpoŋ   'dust'   SC: Ilongot *diapɨŋ.* Cf. Proto–Southern Central Cordilleran *dalapɨŋ 'hearthboard'.

eyen   'not'   CC: Itneg *ʔiyan* 'not'.

gusu   'fetid'   CC: Northern Kankanaey *goso.*

ikna   'hear'   NC: East Cagayan Agta *gikna,* Isneg, Malaweg *giʔna,* Ibanag *ginna* 'hear'. Cf. Ilokano *rikna* 'perceive, feel'.

kurup   'eyebrow' CC: Kalinga *kulup ~ ʔulup.*

senag   'red'   CC: Bontok *sinal* 'to be reddish'. Cf. TAG *sinag* 'ray of light', Isneg, Itawis *sinag* 'sun(shine)'.

tantu   'question' CC: Isinai *santu.* The noncorrespondence of the first segment is problematic.

Additionally, 15 items appear to be innovations exclusively shared by DGTU and two or more branches of the Cordilleran family.

adew   'monkey'   NC: Paranan *adaw;* CC: Isinai *ʔaraw.* DGTU also has *adʸo* and *adʸaw.* Cf. Kalanguya *tadaw* 'monkey' and DGTC *adaw* 'baby monkey'. The intervocalic *d* in DGTU suggests that this is a likely borrowing from elsewhere.

adi ~ adde 'carry' SC: Ilongot *ʔadɨ ~ ʔidɨ;* ALTN: *ʔadɨn ~ ʔiddɨn.*

apsut   'sour'   NC: Yogad *massut,* Gaddang *assut,* East Cagayan Agta *apsot;* Arta *apsut;* ALTN, ALTS *ʔapsut.* This item also occurs in Sinauna as *ʔabsut.*

bol   'carry'   Ilokano: *bael* 'carry'; NC: Central Cagayan Agta *ibbʌlan* 'hold'.

buŋtot   'rotten, fetid' NC: Yogad, Gaddang *buntut* 'bad-smelling', Adasen *buŋsut* 'rotten'; CC: Itneg, Kalinga *buŋsot* 'rotten', Ifugaw *buŋtut* 'stench'.

diplut   'dirty'   CC: Northern Kankanaey *diplot,* Ifugaw *diplut;* ALTN dipl+t, ALTS *diplot.*

dipog	'dust'	NC: East Cagayan Agta *dipog;* CC: Bontok *dapol,* Kankanaey *dapʔo ~ dapo,* Ifugaw *dapʔul ~ dapul,* Isinai *depu;* SC: Ibaloy *čapʔol,* Kalanguya *dapʔul,* Ilongot *dɨpoy.* This represents a semantic shift from PAn(Dy) *DapuR 'hearth' via PPH *DapuR 'ashes'.
getaŋ	'buy'	Ilokano *gataŋ;* NC: Isneg, Malaweg, Yogad, Itawis, Ibanag, Gaddang, Central Cagayan Agta *gataŋ,* East Cagayan Agta *gumataŋ;* Arta *rataŋ.*
gipot	'tie'	NC: Isneg *gappat,* DGTC *gɨpɨt;* ALTN *gɨpɨt;* Arta *gɨptan* 'to tie (as an animal)'.
megut	'narrow'	NC: *igot* 'narrow;' SC: *ʔigut* 'small;' ALTS *ʔigut* 'narrow'. Cf. Ilokano *irut* 'tight'.
kanin	'later today'	NC: Yogad *nani;* SC: Kalanguya *ʔaʔani, ʔintanni, ʔagannin;* ALTS *kani ~ kakani.*
kilyat	'lightning'	CC: Bontok *kɨlyat,* Ilongot *kɨyat* 'lightning'.
kuyuŋ	'fat'	NC: Gaddang *kuyuŋ* 'belly', Malaweg *kuyuŋ* 'intestines;' SC: Ilongot *kuyuŋ* 'intestines, stomach'. The DGTU item may be cognate with the others despite the somewhat large semantic gap.
rakod	'balete tree'	NC: DGTC *hakɨd;* SC: Ilongot *γakɨd* 'balete tree (Ficus stragulans)'. Cf. PPH(Z) *Raked 'bundle'.
tubi	'areca nut'	NC: Gaddang *tʌbbi;* Arta *tabbi* (borrowed from Gaddang); CC: Ifugaw *tubi;* ALTS *tubi ~ tobi.*

5.3.2.3 Two or more northern Philippine microgroups.

Certain items, not appearing in the Central Philippine group, are shared more widely among northern Philippine languages.

alin	'not'	Bashiic: Itbayaten *ʔalih;* SC: Ilongot *ʔɨγi;* SBL: Kapampangan *ʔali.*
diggis	'rat'	ALTN *dagis;* SBL: Mag-anchi, Botolan *dagih,* Kapampangan *dagis.*
dino	'where?'	Bashiic: Yami *jinu,* Itbayaten *dinuh,* Ivatan *di:nu ~ ji:nu;* Ilokano *adinu, sadinu;* NC: Itneg *diʔanu;* CC: Kalinga *dinu;* ALTN *ʔadinu.*
guramut	'finger'	NC: Paranan, Kasiguranin *guramɨt;* ALTN *guramut;* ALTS *gulamot;* SBL: Tina *gulamot,* Botolan *gulamɨt.*
katat	'skin, bark'	SC: Pangasinan, Ilongot *katat;* ALTN *ʔatat,* ALTS *katat;* SBL: Bolinao, Tina, Botolan *katat* 'skin'.
sampat	'good, pretty'	ALTS *sampat* 'pretty;' SBL: Botolan, Mag-anchi, Ambala *hampat* 'good'.
sula	'buttocks, anus'	ALTS *sula* 'buttocks, anus;' Northern Mangyan: Alangan *sulat* 'anus;' SBL: Mag-indi *suwat* 'vagina'. This suggests a possible reconstruction of *sula(t). The Alangan form has diffused into Hanunóo.

5.3.3 Central and Southern Philippine Languages.

DGTU shares one lexical item exclusively with one Kalamian language. Because of its semantic content, it is suspect.

tala	'weave cloth'	Kalamian Tagbanwa: *talaʔ.*

I am not aware of any lexical items that DGTU shares exclusively with Inati, Bilic, or Sangiric. There are three other lexical items that DGTU shares with Luzon languages and with a member of a Philippine microgroup other than those Blust ascribes to the Greater Central Philippine group.

etud	'knee'	NC: Adasen *ottud,* Paranan and Kasiguranin *ɨttud;* Tiruray *ʔɨtur* 'knee'. This suggests a PPн reconstruction of *hetud from PAN(C) *tuhud via *hutud 'knee'.
pasiŋil	'cheek'	ALTN *paseŋil,* ALTS *pasiŋil;* Southern Palawano *pʌsiŋil* 'cheek'.
sabut	'pubic hair'	NC: Paranan, DGTC; Arta; ALTN, ALTS; Agutaynon *sabut* 'pubic hair;' Sambalic *sabut* 'hair, body hair'.

5.3.3.1 Central Philippine Microgroup. DGTU shares 14 lexemes with the Central Philippine microgroup to the exclusion of all other languages, seven of which lexemes have cognates in Bikol or Tagalog. Any of these items, of course, could have diffused into DGTU, as some of them have apparently been borrowed by languages peripheral to the Central Philippine microgroup.

bokoʔ	'different'	BKL (Rugnot and Viga, Catanduanes) *bukoʔ.* Cf. Mansaka and Kalagan *bɨkiʔ* 'not (negator of nominals)'. Cf. also *bukud* in 5.3.3.2.
butkon	'arm'	Kinaray-a *butkɨn,* Samar-Leyte and Cebuano *butkon,* Aklanon and Hiligaynon *butkun* 'arm and hand'. Batak *butkɨn,* Aborlan Tagbanwa *bɨtkɨn,* and Inati *betken* are all likely loans from Bisayan. A metathesized form *bukton ~ bɨktɨn* seems to be limited to the Central Philippine microgroup.
duman	'there (far)'	BKL *duman* 'there (far from speaker and addressee)'.
kom	'squeeze'	TAG *kiʔim* 'tweezers'.
laweg	'hunt'	Tausug *lawag.*
liwet	'repeat'	BKL (Lagonoy), Hiligaynon, Masbateño, Romblon, Samar-Leyte *liwat.*
lubi	'coconut'	Hiligaynon, Masbateño, Samar-Leyte *lubi.* ALTS *lubi* 'coconut' is borrowed from DGTU, and Binukid *lubi* and Western Cotabato Manobo *luvi* are most likely borrowed from Central Philippine.
maksa	'hard'	BKL *kusa ~ kɨsa.*
malapsay	'light, white'	Hiligaynon *lapsiʔ* 'light'. The noncorrespondence of the final segments is irregular.
mamaget	'hunt'	TAG *pagat* 'pursue, chase'.
sakat	'climb'	BKL *sakat.* DGTU also has *sagkad.* Cf. TAG (Eastern Marinduque) *sakad* 'climb'.
sapow	'above'	Hiligaynon *sapaw.* But cf. Isneg *sapaw* 'top, peak'.
sulit	'say'	Mansaka *surit* 'say'. Cf. Cebuano and Surigaonon *sulti* 'say'.
tanus	'straight'	BKL, Cebuano *tanos* 'straight'. Kinamigin *tanus* is likely to have been borrowed from Bisayan.

5.3.3.2 Greater Central Philippine Group. In addition to those items that DGTU shares with the Central Philippine microgroup, another seven items are more widely shared within the Greater Central Philippine group, four of them with the Central Philippine microgroup.

bebiʔ	'spouse'	Buhid *babay* 'spouse'.
bukud	'different'	Buhid *bukod* 'different, other'. Cf. PAN(B) *buke(nŋ) 'negative'.
buloŋ	'medicine'	BKL, Hiligaynon, Cebuano, Samar-Leyte *buloŋ,* Maranao *boloŋ;* Manobo, Subanun, *buluŋ* 'medicine'. Kalamian Tagbanwa, Agutaynon, Bilaan, and Tboli *buluŋ* 'medicine' are most likely borrowed from Bisayan. Cf. PMP(Ch) *buluŋ 'leaf'.

ilat	'wait'	Bᴋʟ *halat ~ hulat ~ ʔɨlat,* Hiligaynon, Cebuano, Samar-Leyte *hulat,* Batak and Aborlan Tagbanwa *ʔɨlat.* Agutaynon and Kalamian Tagbanwa *ʔɨlat* and Sindangan Subanun *mɨgɨlat* are likely borrowed from Central Philippines.
komot	'hand'	Siocon Subanun *komot.* Cf. PAɴ(D) *kamet 'hand'.
simog	'wet'	Bᴋʟ (Buhi) *sɨmɨg,* Batak *maɨmɨg,* Aborlan Tagbanwa *maʔɨmɨg* 'wet'. A likely reconstruction at the level of Proto–Greater Central Philippine would be *(s)emeg 'wet'.
umaged	'child-in-law'	Hiligaynon, Samar-Leyte, Cebuano, Hanunoo *ʔumagad,* Aborlan Tagbanwa *niyagad* 'child-in-law'. Agutaynon *ninagad* and Kalamian Tagbanwa *minagad* are apparent loans. Cf. also Mansaka *ʔinagad* 'companion'.

The evidence gleaned from shared lexical items lends weight to the grouping of DɢᴛU with languages of the central Philippines. After discarding likely borrowings from the lists that DɢᴛU shares with Cordilleran or other microgroups outside the Greater Central Philippine group, we are left with a few probable correspondences. Those items must then be assigned to the level of Proto-Philippines.

5.4 LEXICOSTATISTICS. Lexicostatistics, as mentioned above, is a technique often distrusted when used as the sole measure of language relatedness. It can, nevertheless, yield some idea of language relatedness, provided that the items compared have been carefully screened for borrowings and that they are based on justifiable reconstructions rather than superficial similarity. Given the discussion above (5.3.1.) on the sharing of lexical innovations among languages of northern Luzon spoken by Negrito populations, we would expect the percentages of cognates shared by DɢᴛU and these languages to be inflated. Such is, indeed, the case with some of them but not with others. The percentage of cognates shared with AʟᴛS is 40%, far above the norm for DɢᴛU's relationship to other Luzon languages, and that with DɢᴛC, at 35%, is a bit higher than with most of the NC languages. The percentages shared with other Negrito languages with which DɢᴛU is in contact fall within the lower ranges: Northern Alta 33%, Arta 30%, Sinauna 30%, and Capalonga Inagta 25%.

The ranges of percentages of cognates that DɢᴛU shares with microgroups in the Philippines are as follows:

Bashiic	24–25%	Danaw	26–31%
Cordilleran	24–34%	Manobo	21–28%
Sambalic	24–35%	Subanun	27–28%
Northern Mangyan	21–24%	Kalamian	25–26%
Southern Mangyan	25–32%	Inati	31%
Palawanic	28–40%	Sangiric	22–26%
Central Philippine	23–38%	Bilic	19–29%

On this basis DɢᴛU is more closely related to the languages of the Greater Central Philippine group—and, for that matter, to the Palawanic microgroup—than it is to Cordilleran. With the Palawanic languages, DɢᴛU shares the following percentages of cognates:

Batak	28%
Aborlan Tagbanwa	40%
Southern Palawano	33%

The disproportionately high percentage of cognates shared with Aborlan Tagbanwa is undoubtedly the result of loans in that language from Bisayan languages.

Within the Central Philippine microgroup, DGTU shares the following percentages of cognates with key languages:

Tagalog	38%	Hiligaynon	32%
Bikol	31%	Cebuano	32%
Aklanon	35%	Samar-Leyte	32%
Kuyonen	31%	Tausug	26%

The lexicostatistical evidence, then, weighs in favor of linking DGTU with the Greater Central Philippine group in contrast to the Cordilleran microgroup.

6. CONCLUSION. In "The early switch hypothesis" (1987), Reid presents several scenarios relating to the acquisition of Austronesian by Negritos and the subsequent contact history of such a group with the donor population. DGTU is cited as an example of the hypothesis by which a Negrito group came into contact with an Austronesian-speaking population in the remote past and thereafter had little intimate contact with them. The evidence presented here substantiates this view.

DGTU exhibits a large number of unique items, a characteristic of a language that has experienced a long history of independent development. There is a body of vocabulary shared exclusively with other nearby languages spoken by Negritos, languages with which it cannot be subgrouped on phonological or morphological grounds. This lexicon is the result of diffusion, of retention of words antedating Austronesian, and/or of the retention of Austronesian words lost elsewhere in Philippine languages. The lexicostatistical figures and the lexicon retained from higher levels provide convincing evidence that DGTU is more closely related to languages of the central Philippines than it is to Cordilleran.

If the ancestors of the modern Umiray Dumaget acquired the Austronesian component of their language, then, from Central Philippine-speakers, how early was this contact? In other words, should we consider DGTU a member of the Central Philippine microgroup or should we consider it a separate entity within the Greater Central Philippine group coordinate with the Central Philippine, Palawanic, Southern Mangyan, Danaw, Manobo, Subanun, and Gorontalo-Mongondow microgroups? The lexical distinctiveness within the core vocabulary—and to a certain extent the phonological peculiarities of DGTU—suggests the latter as the more practical conclusion.

REFERENCES

Blust, Robert. 1969. Some new Proto-Austronesian trisyllables. *Oceanic Linguistics.* 8:85–104.

———. 1970. Proto-Austronesian Addenda. *Oceanic Linguistics* 9:104–162.

———. 1980. Austronesian etymologies. *Oceanic Linguistics* 19:1–181.

———. 1986. Austronesian etymologies—III. *Oceanic Linguistics* 25:1–123.

———. 1989. Austronesian etymologies—IV. *Oceanic Linguistics* 28:111–180.

———. 1991. The Greater Central Philippines hypothesis. *Oceanic Linguistics* 30:73–129.

Headland, Thomas N., and Janet D. Headland. 1974. *A Dumagat (Casiguran)–English dictionary.* Series C-28. Canberra: Pacific Linguistics.

Himes, Ronald S. 1984/1985. Allophonic variation and the Bontok-Kankanaey voiced stops. *Philippine Journal of Linguistics* 15(1/2):49–56.

Lambrecht, Frans Hubert. 1978. *Ifugaw–English dictionary.* Baguio City: The Catholic Vicar Apostolic of the Mountain Province.

Macleod, Thomas R. 1972. Verb stem classification in Umiray Dumaget. *Philippine Journal of Linguistics* 3(2):43–74.

McFarland, Curtis D. 1977. *Northern Philippine linguistic geography.* Monograph Series, No. 9. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

———. 1980. *A linguistic atlas of the Philippines.* Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

Panganiban, Jose V. 1973. *Diksyunaryo-Tesauro Pilipino–Ingles.* Quezon City: Manlapa Publishing Co.

Reid, Lawrence A. 1973. Kankanay and the problem *R and *l reflexes. In *Parangal kay Cecilio Lopez: Essays in honor of Cecilio Lopez on his seventy-fifth birthday,* ed. by Andrew B. Gonzalez, 51–63. Special Monograph Issue No. 4. *Philippine Journal of Linguistics.*

———. 1974. The Central Cordilleran subgroup of Philippine languages. *Oceanic Linguistics* 13:511–560.

———. 1976. *Bontok–English dictionary.* Series C-36. Canberra: Pacific Linguistics.

———. 1979a. Evidence for Proto-Philippine nominative marking. *Philippine Journal of Linguistics* 10(1/2):1–20.

———. 1979b. Towards a reconstruction of the pronominal systems of Proto-Cordilleran, Philippines. In *South-East Asian Linguistic Studies,* vol. 3, 259–275. Series C-45. Canberra: Pacific Linguistics.

———. 1987. The early switch hypothesis: Linguistic evidence for contact between Negritos and Austronesians. Special issue, *Man and Culture in Oceania* 3:41–59.

———. 1989. Arta, another Philippine Negrito language. *Oceanic Linguistics* 28:47–74.

———. 1991. The Alta languages of the Philippines. In *VICAL 2, Western Austronesian and contact languages: Papers from the Fifth International Conference on Austronesian Linguistics,* ed. by Ray Harlow, 265–297. Te Reo Special Publication. Auckland: Linguistic Society of New Zealand.

———. 1994. Possible non-Austronesian lexical elements in Philippine Negrito languages. *Oceanic Linguistics* 33:37–72.

Reid, Lawrence A., ed. 1971. *Philippine minor languages: Word lists and phonologies.* Oceanic Linguistics Special Publication, No. 8. Honolulu: University of Hawai'i Press.

Santos, Pilar C. 1975. Sinauna Tagalog: A genetic study examining its relationship with other Philippine languages. M. A. thesis, Ateneo de Manila University, Quezon City.

Scott, William H. 1957. *A vocabulary of the Sagada Igorot dialect.* Philippine Studies
        Program, Transcript No. 6. Chicago: Department of Anthropology, University of
        Chicago.
Soberano, Rosa P. 1976. The dialects of Marinduque Tagalog. Ph.D. dissertation, Ate-
        neo-Philippine Normal College Consortium.
Tharp, James A. 1974. The Northern Cordilleran subgroup of Philippine languages.
        Working Papers in Linguistics, University of Hawai'i 6(6):53–114.
Tharp, James A., and Mateo C. Natividad. 1976. *Itawis–English wordlist with English–
        Itawis finderlist.* New Haven: Human Relations Area Files, Inc.
Thiessen, Henry, A. 1981. *Phonological reconstruction of Proto-Palawan.* Anthropolog-
        ical Papers No. 10. Manila: National Museum.
Thomas, David, and Richard Gieser 1973. A decimal classification for Philippine lan-
        guages. In *Parangal kay Cecilio Lopez: Essays in honor of Cecilio Lopez on his sev-
        enty-fifth birthday,* ed. by Andrew B. Gonzalez, 64–70. Special Monograph Issue
        No. 4. *Philippine Journal of Linguistics.*
Tsuchida, Shigeru, Yukihiro Yamada, and Tsunekazu Moriguchi 1987. *Lists of selected
        words of Batanic languages.* Tokyo: University of Tokyo.
Vanoverbergh, Morice 1933. *A dictionary of Lepanto Igorot or Kankanay, as it is spoken
        at Bauko.* Internationale Sammlung Linguistischer Monographien XII. Modling
        bei Wien: Verlag Anthropos.
———. 1956. *Iloko–English dictionary.* Translated, augmented, and revised from Rev.
        Andrés Carro's *Vocabulario Iloco–Español.* Baguio City: Catholic Press.
———. 1972. *Isneg–English vocabulary.* Oceanic Linguistics Special Publication No.
        11. Honolulu: University of Hawai'i Press.
Walton, Charles 1979. A Philippine language tree. *Anthropological Linguistics* 21:70–
        98.
Wurm, S. A., and B. Wilson 1975. *English finderlist of reconstructions in Austronesian
        languages (post-Brandstetter).* Series C-33. Canberra: Pacific Linguistics.
Yap, Fe Z. Aldave 1977. *A comparative study of Philippine lexicons.* Manila: Institute of
        National Language.
Zorc, R. David. 1986. The genetic relationships of Philippine languages. In *Focal II:
        Papers from the Fourth International Conference on Austronesian Linguistics,* ed. by
        Paul Geraghty, Lois Carrington, and S. A. Wurm, 147–173. Series C-94. Can-
        berra: Pacific Linguistics.
———. 1987. Austronesian apicals (*dDzZ) and the Philippine non-evidence. In *A
        world of language: Papers presented to Professor S. A. Wurm on his 65th birthday,*
        ed. by Donald C. Laycock and Werner Winter, 751–761. Series C-100. Canberra:
        Pacific Linguistics.
———. 1994. Austronesian culture history through reconstructed vocabulary (an over-
        view). In *Austronesian terminologies: Continuity and change,* ed. by Andrew K. Paw-
        ley and Malcolm D. Ross, 541–594. Series C-127. Canberra: Pacific Linguistics.

Department of Anthropology
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-4443
ronaldhimes@cox.net